



Nebraska Department of Health and Human Services

# HEALTH ALERT NETWORK Advisory



TO: Primary care providers in the Four Corners Health Department jurisdiction

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RE: Increase in Pertussis

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## Pertussis outbreak

Four Corners Health Department is investigating an increase of **pertussis**. Please consider pertussis in patients with cough illness, especially with coughs lasting more than 14 days. If you suspect a patient has pertussis, please collect a nasopharyngeal swab for testing. Please advise the patient with suspected pertussis to isolate themselves until they have completed 5 days of antibiotics (end of period of communicability).

## Age groups affected

Infections occur in all ages. However, the highest numbers of cases have been reported in **infants (under 1 year)** and **11-year-olds**. Because of waning immunity to pertussis, cases occur regardless of vaccination status or history of illness.

## Exposed individuals

Advise the patient/family that **close contacts** (especially high risk or those in contact with high risk individuals) will likely need **antibiotic prophylaxis, regardless of immunization status**, and should

ensure that they are up-to-date on pertussis vaccination. Four Corners Health Department investigates all cases and makes recommendations for who should be observed closely for development of pertussis or receive prophylactic treatment based on exposure. **Please assist us in assuring contacts are appropriately treated if recommended.**

## Treatment

**Macrolide antibiotics** (azithromycin, erythromycin and clarithromycin) are the primary agents. Trimethoprim-sulfamethoxazole can be used as alternative in patients > 2 months. Details/**dosages** can be found in the CDC report (<http://www.cdc.gov/mmwr/PDF/rr/rr5414.pdf>) for various age groups. **Patients should not participate in school or other group activities until they have been treated for 5 days with an appropriate antibiotic.**

## Tdap vaccination recommendations

CDC Advisory Committee on Immunization Practices (ACIP) **expanded recommendations in 2011**

for Tdap vaccination (<http://www.cdc.gov/vaccines/vpd-vac/pertussis/recs-summary.htm>).

Additional recommendations include:

- use of Tdap regardless of **interval** since the last tetanus- or diphtheria-toxoid containing vaccine, and
- use of Tdap in **adults aged 65 years and older** and **under-vaccinated children aged 7 through 10 years**.

## Pregnant women and cocooning of infants

The ACIP made **new recommendations in 2012 to increase protection of newborn infants** ([http://www.cdc.gov/media/releases/2012/a1024\\_Tdap\\_immunization.html](http://www.cdc.gov/media/releases/2012/a1024_Tdap_immunization.html)), which included:

- **Maternal vaccination:** ACIP recommends that women's health-care personnel implement a Tdap vaccination program for **all pregnant women** (ideally between 27 and 36 weeks), **for each pregnancy**, regardless of history of previous boosters.
- **Cocooning:** ACIP recommends that adolescents and adults (e.g., parents, siblings, grandparents, child-care providers, and health-care personnel) who have or anticipate having close contact with an infant aged <12 months should receive a single dose of Tdap to protect against pertussis if they

have not previously received Tdap.

**Booster  
vaccinations  
needed in adults  
and adolescents**

Survey data show that **only 6% of adults and 52% of adolescents have had their Tdap booster.**(1)

Please encourage all adult and adolescent patients to get their booster dose of Tdap, especially if they will have contact with an infant or other high risk individual (e.g. parents, grandparents, childcare providers, health-care workers, etc.) When vaccinating to protect vulnerable populations (i.e. infants) there is no minimum time interval between doses of Td and Tdap. Patients are more likely to get vaccinated if their personal doctor recommends it.

1. 2010. Tetanus and pertussis vaccination coverage among adults aged  $\geq 18$  years—United States, 1999 and 2008. MMWR 2010;59:1302–6.